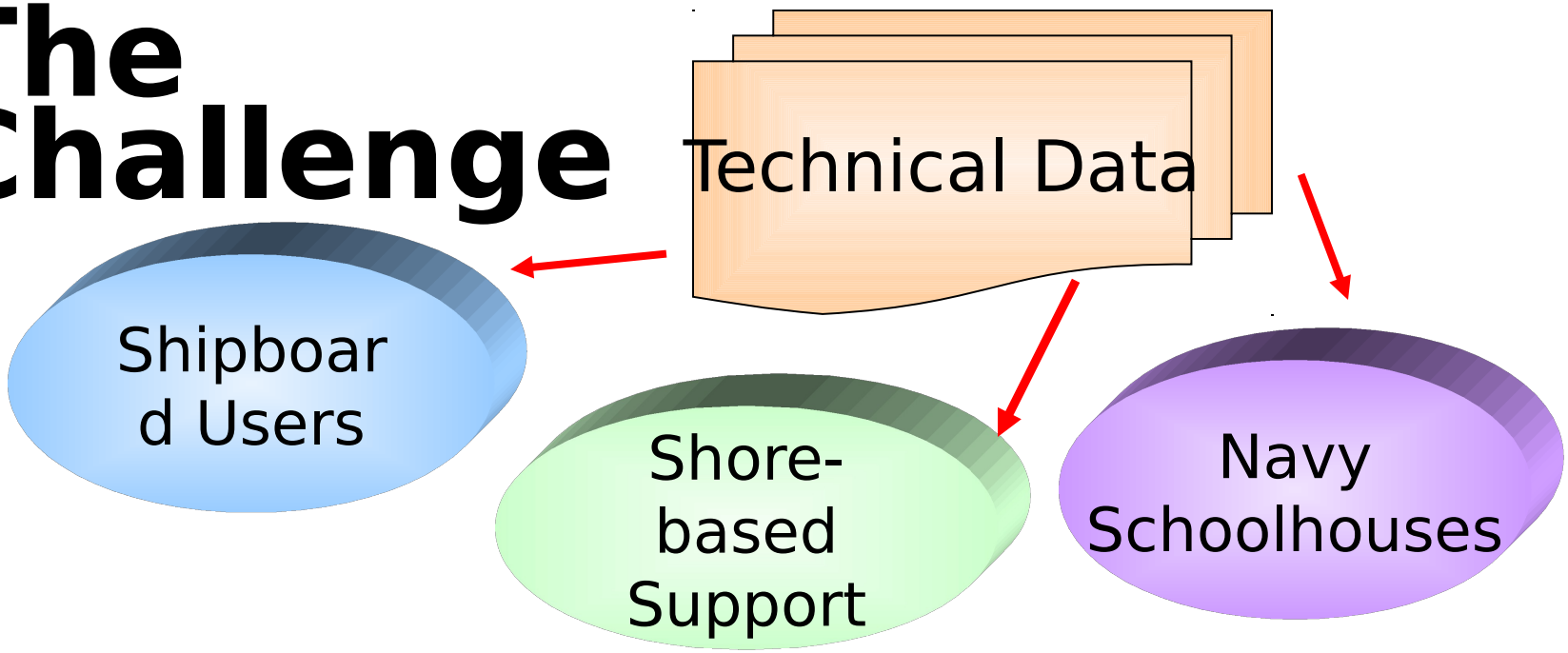
Technical Data Knowledge Management Integrated Data Environment (TDKM-IDE)

A Defense Information Infrastructure (DII) Initiative

NAVSEA
NAVAL SEA SYSTEMS COMMAND

NAVAL AVIATION SYSTEMS TEAM

The Challenge



The Problem

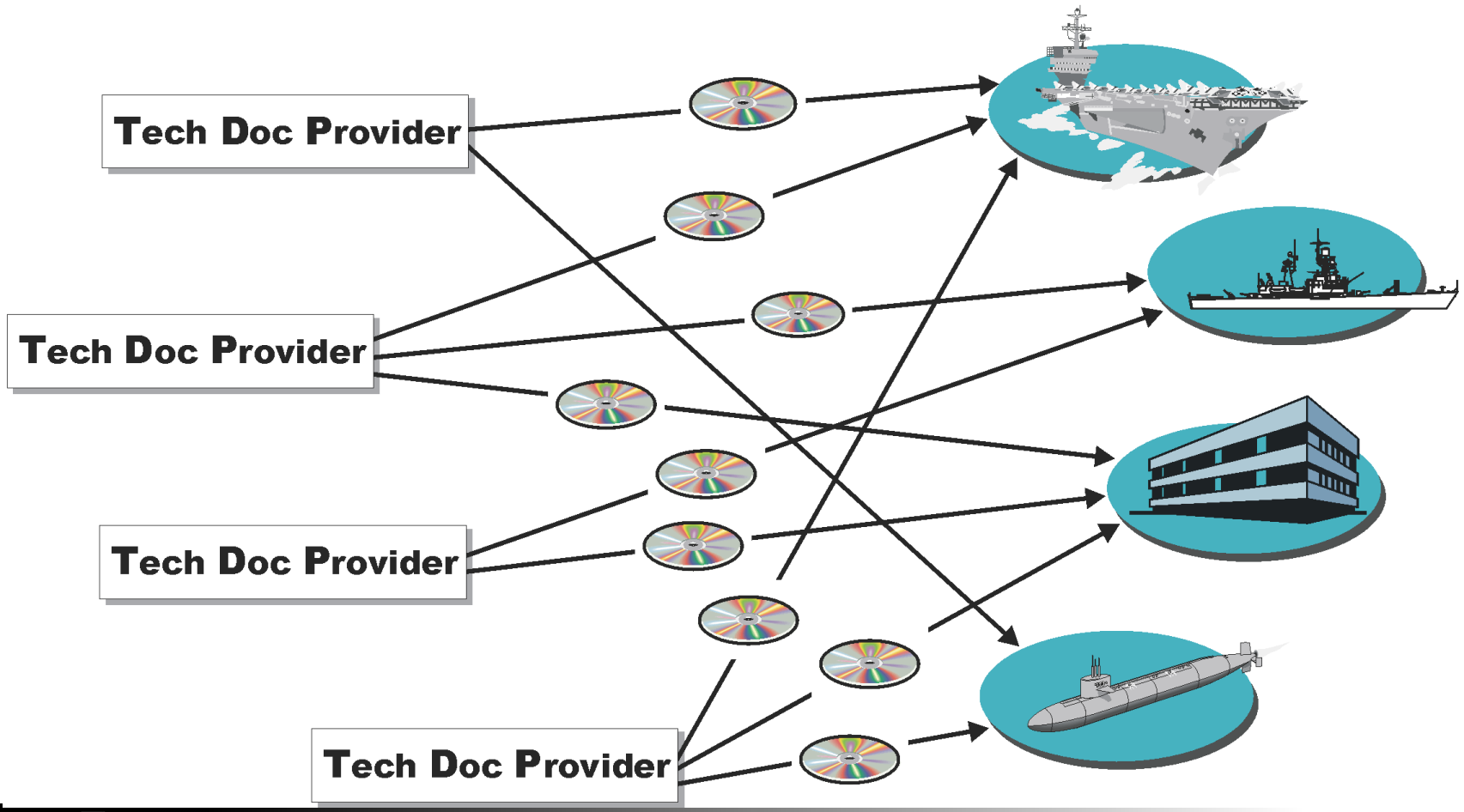
Data Aggregation
Data Redundancy
Data Presentation
Data Timeliness
Data Exchange
Data Adequacy

Current Tech Doc Distribution

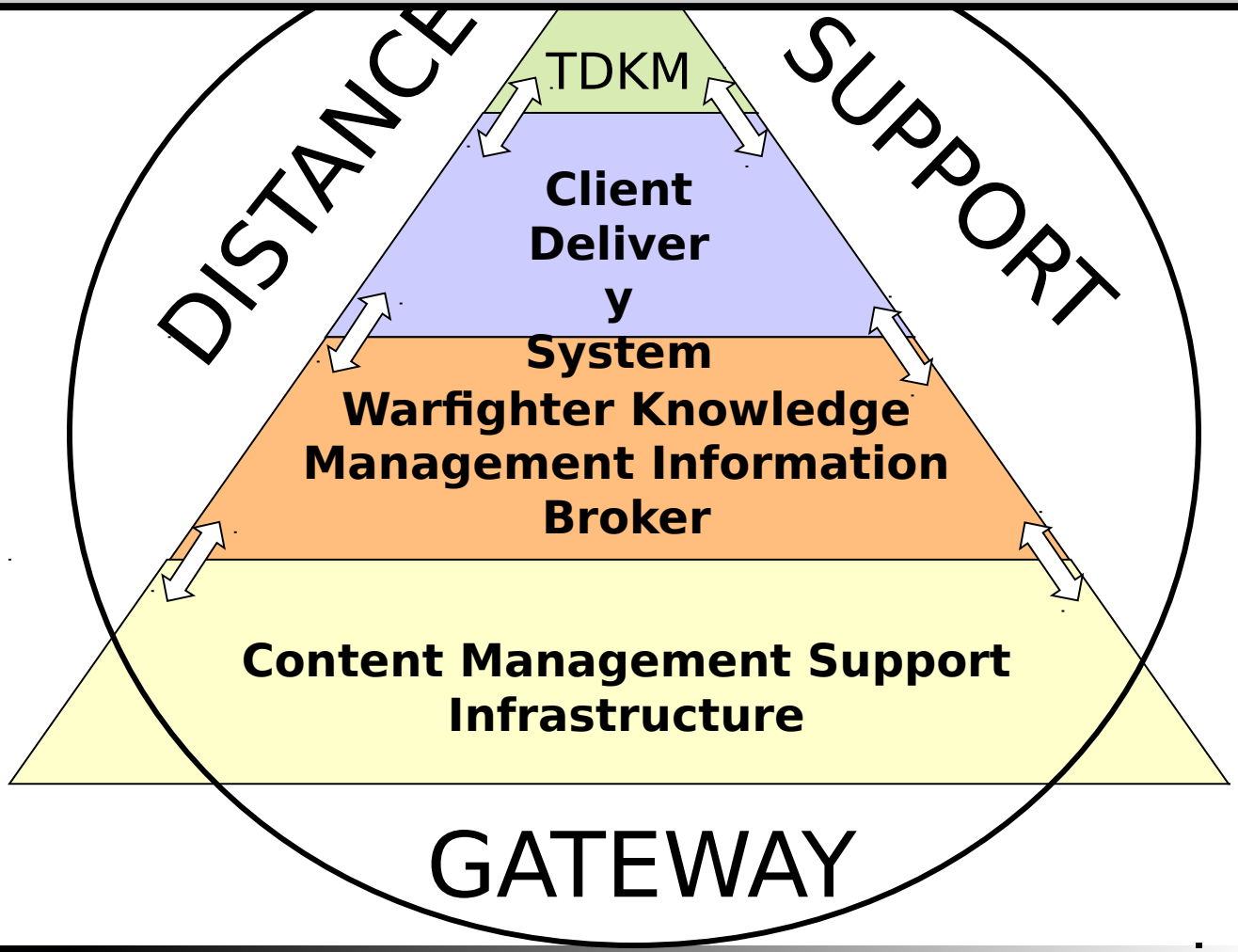
Significant Lead time
Necessary to Compile and Distribute
Tech Doc on Optical Media

Distribution Heavily Dependant
on Optical Media and US Mail

Digital Library
Management Generally
Performed by End Users



Technical Data Knowledge Management



TDKM-IDE Overview

- What is it?
- What is it intended to do?
- How does it work?
- Notional Overview
- Notional Implementation
- Improved Operational Capability

TDKM - IDE
What is it?

- ***Prototype*** **Data Environment for Navy Tech Data**
- **Installation & Load of Data into Common Content Management System**
- **Field Implementation of a Technical Data Knowledge Management System.**

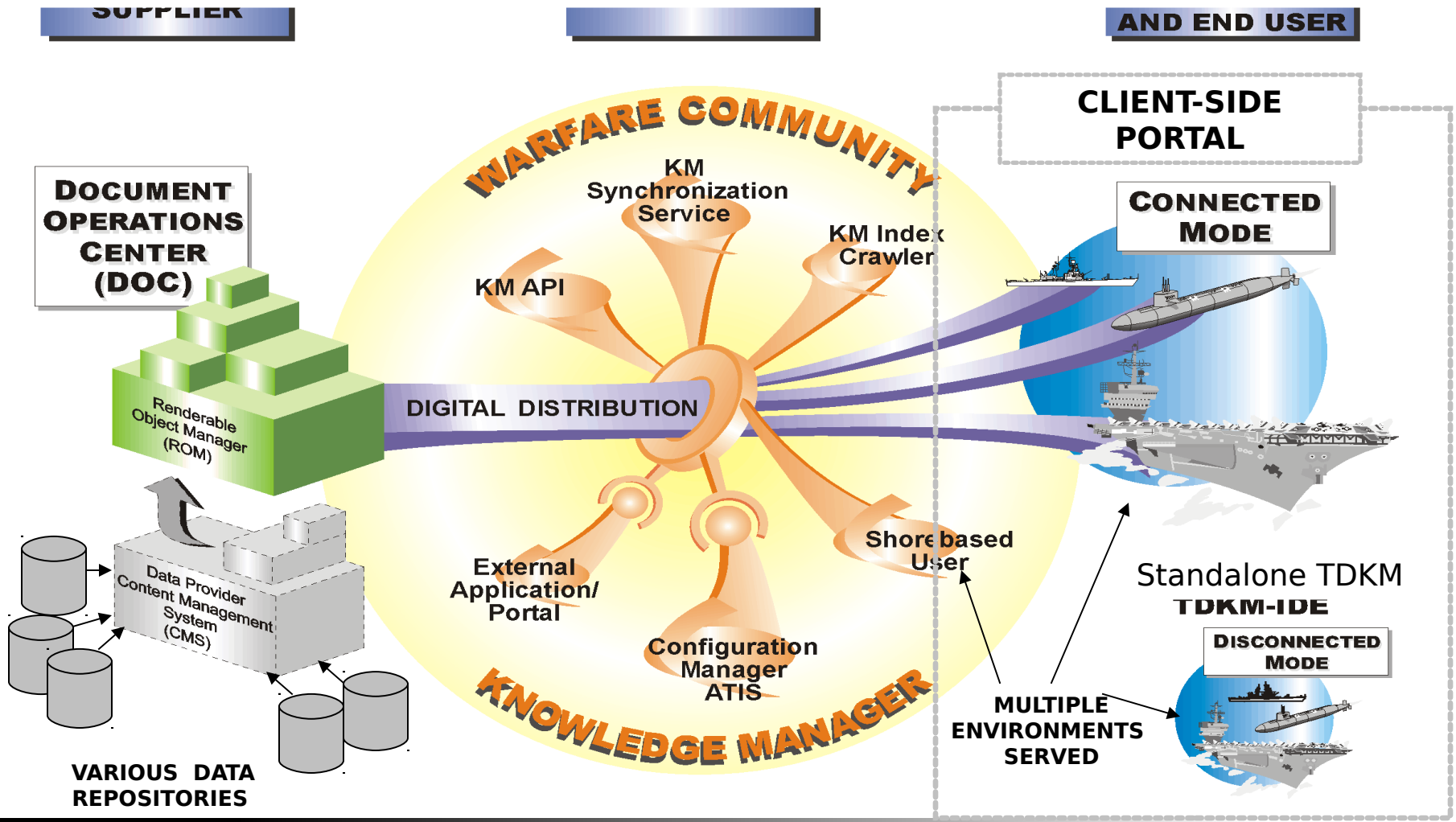
TDKM - IDE
What is it intended to do?

- **Provide a "model" for a Common, Replicable Integrated Data Environment (IDE) for Navy/DoD TD**
  - **Common, Uniform TD Business Process**
  - **Uniform Content Management & Control Architecture**
  - **Common Metadata**
  - **Necessary XML Schemas & Style Sheets**
  - **Uniform Knowledge Distribution Environment**
- ***Dynamically Tailor* and Maintain the Deployed Digital Technical Data for Both Operational Units and Individual Users**

TDKM-IDE
How does it work?

- **Digital TD in Various Formats IAW Commercial Standards**
- **Management & Control at the Info. Component Levels**
- **Re-Purpose Data to Deliver Multiple Products**
- **Use Existing JCALS Regionalization System and SANS**
- **Use *Profiles* Describing Users' TD Requirements**
- ***Maps (or Indices)* to the Content Data in Stores**
- **Pull Necessary Data Objects From Distributed Content Management Systems**
- **Push Required Library or Update to the User Site and Individual**

Technical Data Knowledge Management (TDKM)



TDKM-IDE Notional Implementat

XML Portal Software

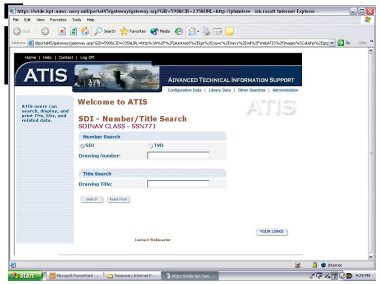
Warfighter Knowledge Manager

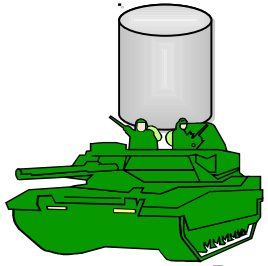
Content Manager

NALCOMIS

Distance Support Gateway

XSL Rendered XML-HTML





Training Pipeline

Fleet and Shore-based Information Access Interfaces

NAVSEA
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TDKM-IDE Improved Operational Capability

Content Management

- More Efficient Change & Update Process
- Greatly Simplified Versioning
- More Efficient Configuration Management
- Reduced Cycle Times
- XML-Based - Portability over CM & Pub. S/W
- Cost Avoidance Due to Data Re-use
- Improved Data Protection

TDKM-IDE Improved Operational Capability

Replicable Business Processes

- **Common Service-wide Content Management**
- **Common Metadata for TDKM**
- **Uniform Store & Distribute Infrastructure - JCALS**
- **Re-use of Information at More Granular Level**
- **Faster, More Responsive, Change and Update**
- **Higher Quality Data and Documents Delivered to Ships**

TDKM-IDE Improved Operational Capability

Knowledge Management

- **Timely, Accurate, and Readily Accessible Technical Data to Satisfy Operations, Maintenance, and Training Missions**
- **Dynamic, Tailored Distribution to User Activities and Individuals**
- **Web Access to Information Components**

Questions?

TDKM-IDE Backup Slides

Participating Organizations

TDKM-IDE is a Collaborative Project among Air, Subsurface, Surface Organizations, and Industry

- **Knowledge Management**
  - **NAVSEA [92L], NSWCCD [205], AMSEC, LLD**
- **Content Management**
  - **NSWCCD [94], PM JCALS, XyEnterprise**
- **Business Process Engineering**
  - **NAVAIR [3.3/3.6], PBM Associates**
- **Metadata Requirements**
  - **NAVSEA [92L], NSWCCD [205], PBM Associates**
- **Implementation**
  - **COMSUBPAC, NAVSUBSCOL, NAD North Island**

Government Review Team

Diana Hardesty	DLA, LCM
Ed Kirkpatrick	Navy, NAVSUP EIO
Quent Hays	OPNAV N40
Ron Tyler	USMC HQ
Greg Ransom	MCSC
Kevin Paulson	Army LOGSA
Bucky Buchanan	NAVSEA
Mary McGlinn	NAVAIR

Interdependencies

- **Projects and Initiatives**
  - **JCALS**
  - **Distance Support and JATDI**
  - **Web-Enabled Navy (WEN)**
  - **SYSCOM Data Delivery Strategies**
  - **NAVICP Conversion of Legacy Data**
  - **ERP Coordination**
  - **Submarine Non-tactical Applications Delivery Interface System (formerly Virtual Submarine Project (VSP))**
- **Management Process**
  - **Navy Logistics Integration Board Working Group (NLIB WG) will provide oversight**